

REMARKS/ARGUMENTS

Claim Amendments

Claims 1 and 14 have been amended according to the spec paragraph 0039 and FIG. 5 7. Claims 21 and 22 are newly entered and include limitations fully supported by spec paragraph 0002 and FIG. 1. No new matter is introduced.

Claim Rejections- 35 U.S.C. 103

10 Claim 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (hereinafter Kim) US 7,088,772 B2.

Response:

15 The applicant respectfully traverse the rejections made by Examiner for the reasons below.

Claim 1

20 Regarding claim 1, Kim fails to disclose the limitation “updating the storing column of the first memory device by the target vertical predictors, and updating the storing row of the first memory device by the target horizontal predictors, **wherein the target vertical and horizontal predictors lie in the first target block**” as recited in the amended claim 1. Examiner deems that Kim discloses the related limitations in Kim’s Col. 25 8 Lines 3-20 and Col. 4 Lines 48-61, and states that Kim’s storing memory in the upper right memory strongly suggests vertical predictors storage and storing in the lower right and lower left strongly suggests horizontal predictors storage. The applicant disagrees with Examiner’s point of view. Please refer to Kim’s Col. 4 Lines 50-55:

5 *a method for updating motion vector memories for prediction of motion vectors, comprising the steps of a) storing a motion vector of an upper right block in a current macroblock in a left motion vector memory; and b) storing motion vectors of a lower left block and lower right block in the current macroblock in an upper motion vector memory.*

10 The applicant respectfully points out that applicant's predictors (target vertical and target horizontal predictors) updated to the first memory **lie in the same block**, i.e. the first target block. However, Kim's motion vectors (upper right, lower left and lower right blocks) updated the memory **lie in different blocks**. The applicant, therefore, asserts that Kim fails to teach or suggest the limitations "**the target vertical and horizontal predictors lie in the first target block**" as recited in the amended claim 1. Accordingly, the applicant believes that claim 1 has been placed in condition for allowance, and the rejections made by Examiner should be traversed.

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Claims 2-12

20 Claims 2-12 are dependent upon claim 1, and should be found allowable if claim 1 is found allowable.

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Claim 13

Regarding claim 13, Kim fails to disclose the limitations "vertical and horizontal predictors of a block **lie in the most left column and top row of the block**, and the horizontal predictors and the vertical predictors of the block respectively **comprise a DC coefficient and a plurality of AC coefficients**" as recited in the claim 13. Examiner deems that Kim discloses the above limitations in Kim's FIG. 6 and Col. 8 Lines 21-28, and states that predictors can be classified as DC and AC coefficients depending upon the

spatial configuration. The applicant disagrees with Examiner's point of view for the reasons below. Please refer to Kim's Col. 8 Lines 21-28:

5 *FIG. 6 is a flowchart illustrating a motion vector prediction method to which the motion vector memory updating method of the present invention is applied for video decoding. In the preferred embodiment of the present invention, the motion vector prediction method is performed to predict a motion vector of a current macroblock positioned on the nth column of a frame, as an example.*

10 The applicant's predictors **lie in a particular position of the block**. Kim, however, merely discloses a predicted motion vector **positioned on a common position (nth column) of a frame**. In addition, the applicant's predictors comprise AC and DC coefficients, and Kim, however, is silent on it. The applicant, therefore, asserts that Kim fails to teach or suggest the limitation "vertical and horizontal predictors of a block **lie in the most left column and top row of the block**, and the horizontal predictors and the 15 vertical predictors of the block respectively **comprise a DC coefficient and a plurality of AC coefficients**" as recited in the claim 13. Accordingly, the applicant believes that claim 13 has been placed in condition for allowance, and the rejections made by Examiner should be traversed. In addition, claim 13 is dependent upon the claim 1, and should be found allowable if claim 1 is found allowable.

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Claim 14

Regarding claim 14, in light of the arguments of claim 1, the applicant believes that claim 14 should be found allowable.

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Claims 15-16 and 18-20

Claims 15 and 16 are dependent upon the claim 14, and should be found allowable if

claim 14 is found allowable.

Claim 17

5 In light of the arguments of claim 13, claim 17 should be found allowable. In addition, claim 17 is dependent upon the claim 14, and should be found allowable if claim 14 is found allowable.

Patentability of New Claims 21 and 22

10 Claims 21 and 22 specify that the claimed predictive decoding methods generate predictors of blocks before a motion compensation is performed. In other words, the predictors are not motion vectors used in motion compensation. Kim's disclosure, however, is directed to updating motion vector memories only. The applicant therefore contends that the motion vectors taught by Kim fail to read on the claimed predictors. In addition, claims 21
15 and 22 are dependent upon claims 1 and 14 respectively, and should be allowed if claims 1 and 14 are found allowable.

Conclusion

20 For the reasons as described above, Applicant believes that Claims 1 and 14 are allowable over cited reference. Insofar as Claims 1 and 14 are allowable, Claims all dependent upon Claims 1 and 14 including every claimed element thereof, are also allowable on their own merits in claiming additional limitations not included in Claims 1 and 14.

25 Withdrawal of the rejections and allowance of the claims, are respectfully requested. Applicant has made every effort to place the present application in condition for allowance. It is therefore earnestly requested that the present application, as a whole, receive favorable consideration and that all of the claims be allowed in their present form.

Should the Examiner feel that further discussion of the application and the

Appl. No. 10/710,725
Amdt. dated May 26, 2008
Reply to Office action of February 26, 2008

Amendment is conducive to prosecution and allowance thereof, please do not hesitate to contact the undersigned at the address and telephone listed below.

5 Sincerely yours,



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Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C.
15 is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)